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# **Implementation of the Best in Class Project Management and Contract Management Initiative at the U.S. Department of Energy's Office of Environmental Management How It Can Work For You**

**NDIA - E2S2 Conference  
June 14-17, 2010**



**US Army Corps  
of Engineers**  
Huntington District



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# Outline

- Objective
- Department of Energy Office of Environmental Management
- Best-in-Class Project Management Initiative (BICPM)
- Technical Approach
- Assessment Criteria and Results
- Recommendations
- Progress toward BICPM Implementation
- Challenges Facing BICPM Implementation



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## Objective

- Provide a short briefing on:
  - Overview of DOE-EM program and project management challenges.
  - Discussion of the DOE-EM's Best-in-Class Project Management Initiative (BICPM) including its purpose, approach, results, and recommendations.
  - Lessons learned and how Project Management can be applied across other industries and large portfolio management programs.

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# Office of Environmental Management

- EM is responsible for the risk reduction and cleanup of the environmental legacy of the U.S. nuclear weapons program and its five decades of weapons development and nuclear energy research.
- EM is managing one of the largest, most diverse, and technically complex environmental programs in the world.

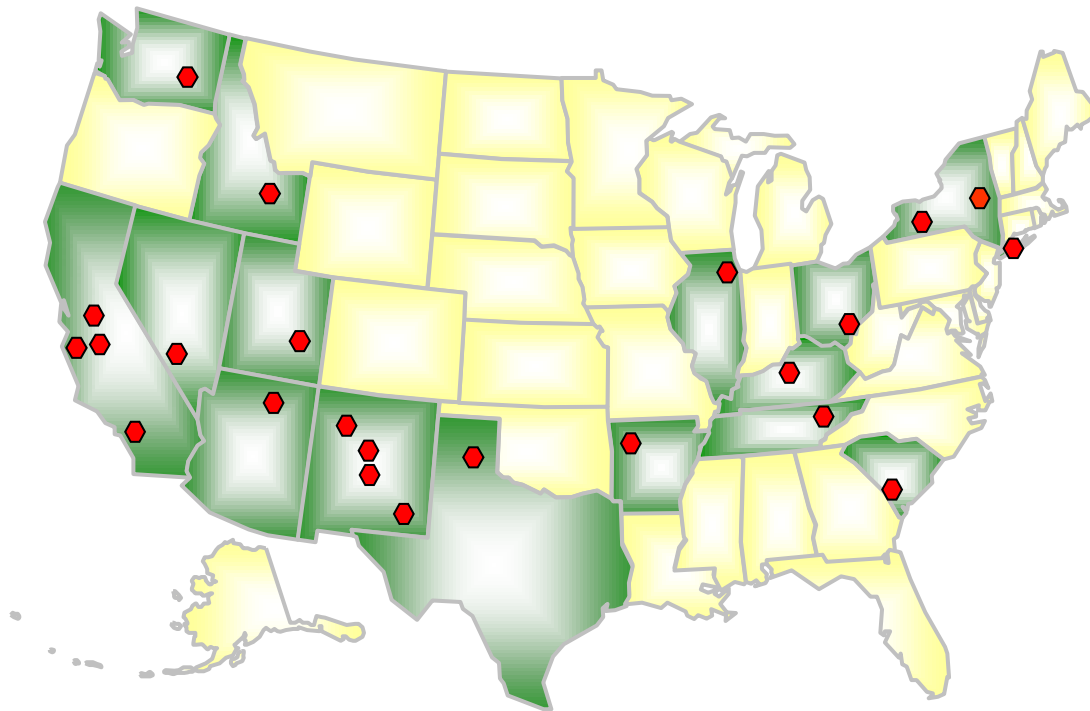


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## Office of Environmental Management

- Originally tasked to clean up 108 contaminated nuclear weapons development and nuclear energy research sites across the U.S. Active cleanup is now concentrated at 23 sites in 15 states.





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# Office of Environmental Management

- DOE spends billions of dollars annually to clean up nuclear wastes
- There are literally thousands of cleanup projects including:
  - Decommissioning of facilities
  - Environmental restoration of soil and groundwater
  - Stabilize and dispose of solid and liquid radioactive wastes
  - Safeguard materials that could be used in nuclear weapons
- DOE-EM has been criticized for poor project and contract management and a lack of accountability and oversight of its major cleanup projects



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## **Best-in-Class Project Management Initiative (BICPM)**

- One of several initiatives undertaken by EM to improve project management
- Assess project management strengths, weaknesses, and skill gaps
- Identify factors that hinder EM's ability to effectively manage its projects
- Identify priority action items needed to correct known problems
- Improve accountability and management of EM's major cleanup projects



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## BICPM Initiative – Approach

- Phase I – Assessment Work Plan – Defined assessment criteria and core competencies needed for project management.
- Phase II – Conduct Site Assessments – Assessed PM strengths, weaknesses, and skill gaps at the field and HQ using criteria and benchmarks.
- Phase III – Corporate Implementation Plan – Documented recommendations and a strategy to address deficiencies.
- Phase IV – Implementation – Implementation of recommendations are currently in various stages; most have been completed.
- Phase V – Cultural Change – In Transition - BICPM is evidenced by substantial improvements in project management performance and an institutionalizing effective project-oriented culture.



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## **BICPM - Project Management Assessment Criteria**

- Compliance with project management orders and directives
- Cost estimating
- Scheduling
- Baseline management
- Project controls
- Risk management
- Engineering expertise
- Functioning integrated project teams
- Contracting and acquisitions
- Project management software
- Training and professional development
- Internal organization structure

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## **Assessment Results – Root Causes of Project Management Deficiencies**

- Inadequate PM / CM resources and skill sets
- Too much reliance on contractor
- Inadequate project oversight / failure to identify project performance issues / insufficient verification of contractor reported EV
- Insufficient design / planning prior to establishing baselines
- Contract type and acquisition strategies
- Size of projects
- Project risks not identified, assessed, communicated, and managed
- Awarding contracts prior to development of adequate independent government cost estimates
- Project management requirements not consistently followed



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## Recommendations

- Assign leadership for BICPM implementation
- Provide additional PM/CM resources based on size, complexity, and life cycle of site mission
- Provide PM / CM capability reach-back
- Perform regular surveillance of contractor reported EV
- Establish a standardized and integrated change control process
- Address unresolved baseline change proposals and REAs
- Clarify roles and responsibilities between PM and CM organizations
- Complete DOE EM project management guidance
- Establish standards for EM management products and practices
- Implement enterprise project management software



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## **Recommendations**

- Identify and adopt best practices, eliminate stove piping
- Develop and improve Federal work plans at each site
- Complete and utilize Federal risk management plans
- Maintain validated Near Term Baselines and defensible Life Cycle estimates
- Training and professional development
- Develop cost estimating database
- Develop EM program level contingency
- Streamline Critical Decision document review and concurrence
- Update and implement human capital plans

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## **Progress Toward BICPM Implementation**

- Development and management of federal baselines
- Development and implementation of federal risk management plans
- Project size reduction and “chunking”
- Project re-categorization into Capital Assets and Operations
- EVMS surveillance and assessment of contractor reported data
- Completion of project management guidance and templates
- Training and mentoring of DOE staff
- Holding the contractor accountable, questioning the contractor
- Functioning Integrated Project Teams
- Compliance with DOE-EM Project Management Order 413.3A





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## **Challenges facing BICPM Implementation**

- Continued Federal reliance on contractor
- Not holding contractors accountable
- Internal organization structures are weak at some sites
- Site needs are much greater than capabilities of smaller teams
- Project management resources not effectively utilized
- Changing priorities at sites, fire drills
- Shortage of risk management, cost estimating and other PM professionals